Elytra, Tokyo, **34** (1): 107–117, May 20, 2006

Two New Species of *Aceraius* (Coleoptera, Passalidae) from Borneo, with a Key to the Bornean Species of *Aceraius*

Masahiro Kon

School of Environmental Science, The University of Shiga Prefecture,
Hassaka-cho 2500, Hikone, Shiga, 522–8533 Japan,

Kunio Araya

Graduate School of Social and Cultural Studies, Kyushu University,
Ropponmatsu 4–2–1, Chuo-ku, Fukuoka, 810–8560 Japan

and

Maryati Mohamed

The Institute for Tropical Biology and Conservation, University Malaysia Sabah,
Locked Bag 2073, 88999 Kota Kinabalu, Sabah, Malaysia

Abstract Two new species of *Aceraius* are described from Sabah, Borneo under the names of *A. hassani* sp. nov. and *A. sawaii* sp. nov. *Aceraius hassani* sp. nov. can be distinguished from the other known congeners by a combination of the following characters: the body is large (more than 47 mm); the anterior angle of head is rounded; the left inner tubercle is located slightly more anteriorly than the right one; the tenth rib of elytron is hairy in the anterior portion. *Aceraius sawaii* sp. nov. resembles *A. sabanus* but can be distinguished from the latter by the following points: the body is smaller (less than 35 mm); the fifth tarsomere is not strongly broadened distad.

Kaup (1868) established the genus *Aceraius* (Coleoptera, Passalidae) and, recently, Boucher (1993) revised the definition of *Aceraius*. This genus is distributed almost throughout the Oriental region and includes 32 known species (Hincks & Dibb, 1935, 1958; Boucher, 1993; Boucher & Kon, 1999; Iwase, 1993, 1994, 1995; Kon, 2001; Kon & Johki, 1989 a, b, 1992, 1993; Kon *et al.*, 1992, 1993 a, b, c, 1995 a, b). The highest species diversity of *Aceraius* is recorded in Borneo from where 23 species have been known (Hincks & Dibb, 1935; van Doesburg, 1941; Kon & Johki, 1989 a, b, 1992, 1993; Kon *et al.*, 1993 a, b, c, 1995 a, b; Boucher, 1993; Boucher & Kon, 1999; Iwase, 1993, 1995).

In the course of our taxonomic studies on the Passalidae from Sabah, Borneo, we found two species of *Aceraius* distinct from all the known congeners. After careful ex-

aminations and comparisons, we have concluded that these forms are new to science. Thus, we are going to describe two new species of *Aceraius* from Sabah, Borneo. In addition, we will also provide a key to the Bornean species of *Aceraius*.

In the following descriptions, we adopt the terminology of GRAVELY (1914) for external morphology and LINDROTH (1957) for male genitalia.

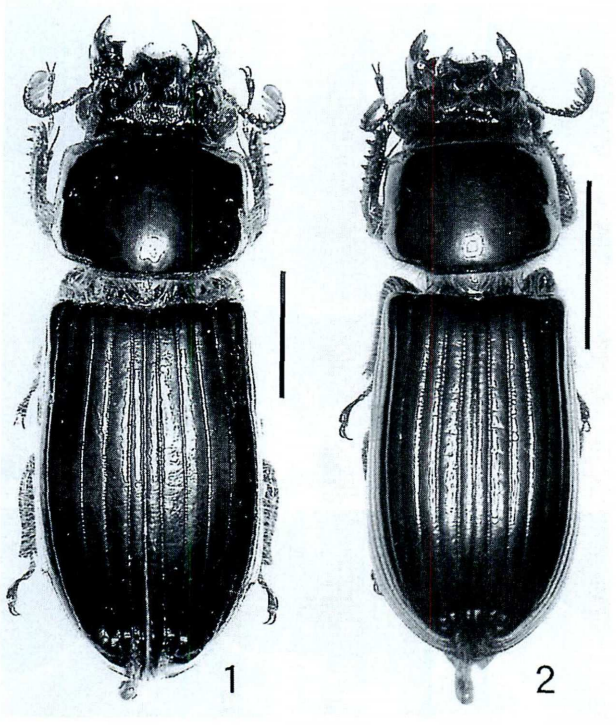
Aceraius hassani KON, ARAYA et MARYATI, sp. nov.

(Figs. 1, 3, 5, 6)

Description of holotype. Male. Length from anterior margin of head to apices of elytra 49.2 mm. Body black, polished.

Anterior angle of head rounded. Canthus without denticle pointed upwards. Left outer tubercle long and slender, much larger than the right one, obliquely truncated at distal end, with outer margin concave, inner margin almost straight; right outer tubercle small, represented as a swelling on anterior margin of head, rounded at distal end. Inner tubercle large, rounded at apex; left inner tubercle located slightly more anteriorly than the right one. Ridge between inner tubercles distinct, concave; frontal ridge vanished on a half way to inner tubercle, accompanied by distinct groove anteriorly; parietal ridge almost straight, not strongly swollen upwards in distal portion; supraorbital ridge weakly curved inwards in anterior portion; apical angle of supraorbital ridge distinct; supraoccipital ridge connected with supraorbital ridge. Area between both outer tubercles weakly hollowed, with a few hairs; areas between frontal and parietal ridges, behind parietal ridge and behind eye with setiferous hair-bearing punctures; frontal area wide, nearly U-shaped, impunctate, hairless. Upper margin of left mandible weakly concave behind upper tooth in lateral view; upper tooth of left mandible much higher than the right one, bifid at apex; anterior margin of left upper tooth concave, with a weak swelling near the base; anterior lower tooth of left mandible bifid dorso-ventrally at apex, much larger than left lowest terminal tooth; upper margin of right mandible slightly concave behind upper tooth; right upper tooth almost right-angled in lateral view; lowest terminal tooth of right mandible obsolete; upper portion of anterior lower tooth of right mandible represented as two weak swellings of inner margin of mandible, the distal swelling much weaker than the proximal one; lower portion of anterior lower tooth represented as a small denticle, located beneath the anterior swelling of upper portion. Labrum with setiferous hair-bearing punctures, anterior margin weakly concave, anterior angles rounded, the left angle more prominent forwards than the right one, left lateral margin almost straight, right lateral margin weakly convex. Mentum densely punctured and hairy in lateral portion, impunctate and hairless in central portion, weakly convex in central portion of anterior margin. Three distal antennal lamellae moderately long; three proximal ones short.

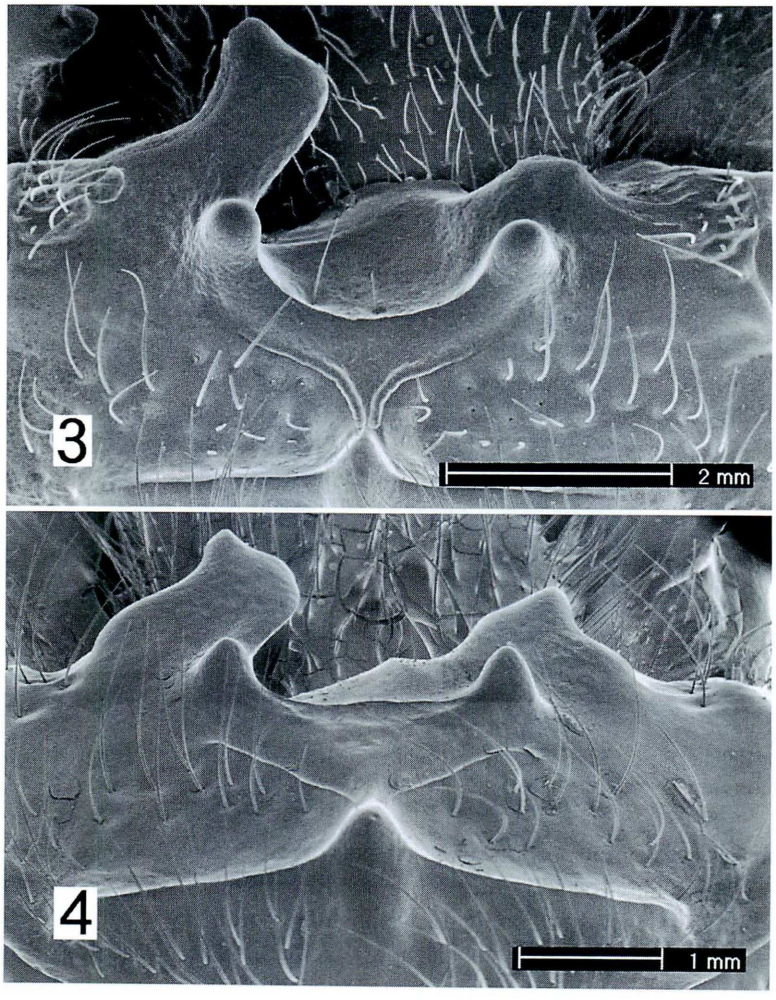
Pronotum polished, with setiferous hair-bearing punctures in lateral potion; posterior plate of prosternum with long hairs. Mesosternum impunctate, hairless, rugose in central portion, with narrow lateral scar; mesothoracic episternum impunctate and



Figs. 1–2. Habitus of *Ceraius* spp., scale 10 mm. —— 1, *Ceraius hassani* sp. nov., male, holotype; 2, *Ceraius sawaii* sp. nov., male, holotype.

hairless in centro-ventral portion, hairy in posterior portion, polished and with large punctures in both anterior and dorsal portions. Ridge separating anterior intermediate and lateral areas of metasternum distinct, punctured and hairy in anterior portion, impunctate and hairless in posterior portion; lateral and anterior intermediate areas densely punctured and hairy throughout; posterior intermediate area hairy in posterior portion along posterior margin of metasternum, hairless in anterior portion, with irregular dents along posterior margin of central area; central area impunctate and hairless throughout. Tenth rib of elytron punctured and hairy in anterior portion close to shoulder, impunctate and hairless in posterior portion; ninth densely punctured and hairy in anterior one-fourth, more sparsely in posterior portion; eighth impunctate and hairless along whole length; seventh sparsely punctured and hairy along whole length; first with a few hairs in posterior portion close to elytral tip. Elytral striae hairless. Fifth tarsomere broadened distally, with upper distal margin rounded.

Visible second abdominal sternite with a few hairs; third to sixth impunctate and hairless. Basal piece of male genitalia trapezoidal in ventral view, with anterior margin slightly concave; parameres united on ventral side, with very slight median sulcus at the middle of ventral side, with anterior margin rounded in lateral view; penis large,



Figs. 3–4. Anterior part of head of *Aceraius* spp. —— 3, *Aceraius hassani* sp. nov., male, holotype, scale 2 mm; 4, *Aceraius sawaii* sp. nov., male, holotype, scale 1 mm.

rounded at distal end, with orifice at the base of dorsal side.

Variation. No sexual dimorphism evident. Body length of paratypes (mean± SD, range), 48.6 mm±0.71, 48.0–49.4 (N=3).

Type series. Holotype: 1♂, Mt. Trus Madi, 1,000 m in altitude, Sabah, Borneo, 17–IX–1997, M. KON leg. Paratypes: 1♀, Mt. Trus Madi, Sabah, Borneo, 1,000–1,200 m in altitude, 11～13–V–1991; 1♀, Mt. Trus Madi, 28–III～12–IV–1994, N. KATSURA leg.; 1♀, North Borneo, Sabah, Crocker Range, 20–IV–1999, K. F. CHEW leg. The holotype is deposited in the collection of the Institute for Tropical Biology and Conservation, University Malaysia Sabah.

Etymology. This species is named in honor of Prof. Dato' Dr. Abu Hassan OTHMAN.

Notes. This species can readily be distinguished from the other known congeners by the combination of the following characters: the body is large (more than 47 mm); the anterior angle of head is rounded; the left outer tubercle is long and slender; the right outer tubercle is small and represented as a swelling; the frontal area is nearly U-shaped; the tenth rib of elytron is hairy in the anterior portion.

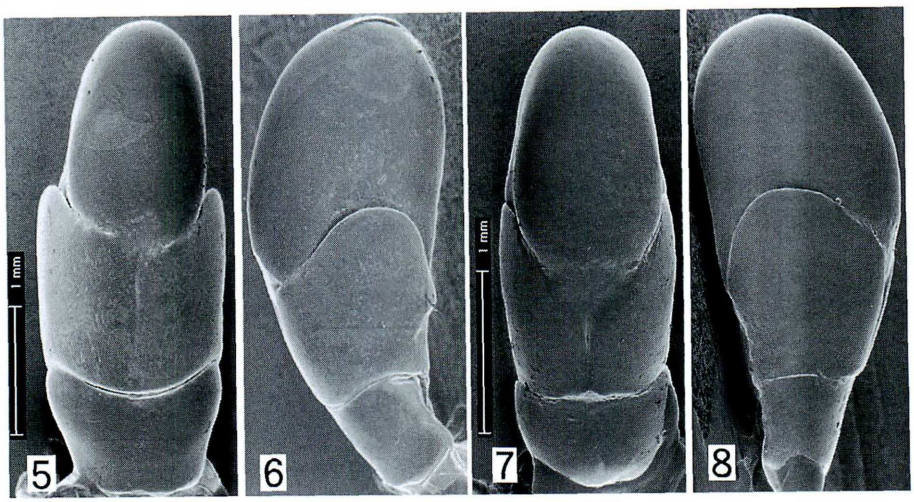
Aceraius sawaii KON, ARAYA et MARYATI, sp. nov.

(Figs. 2, 4, 7, 8, 10)

Description of holotype. Male. Length from anterior margin of head to apices of elytra 34.5 mm. Body black, polished.

Anterior angle of head rounded. Canthus without denticle pointed upwards. Left outer tubercle larger than the right one, obliquely truncated at distal end, with outer distal angle pointed forwards; outer margin of left outer tubercle slightly concave in distal portion, convex in proximal portion; right outer tubercle moderately large, obliquely truncated at distal end, with inner distal angle obtuse, less prominent forwards than the outer one; outer margin of right outer tubercle weakly swollen near the base. Inner tubercle large, triangular, strongly pointed forwards and upwards. Ridge between inner tubercles distinct, almost straight, accompanied by shallow groove posteriorly; frontal ridge slightly curved outwards in distal end, accompanied by distinct groove anteriorly; parietal ridge almost straight, not strongly swollen upwards in distal portion; supraorbital ridge not curved inwards in anterior portion: apical angle of supraorbital ridge distinct; supraoccipital ridge connected with supraorbital ridge. Area between both outer tubercles with a few hairs, hollowed in left half in dorsal view; areas between frontal and parietal ridges, behind parietal ridge and behind eye with setiferous hair-bearing punctures; frontal area wide, impunctate, hairless. Upper margin of left mandible almost straight behind upper tooth in lateral view; upper tooth of left mandible much higher than the right one, bifid at apex; anterior lower tooth of left mandible simple at apex, larger than left lowest terminal tooth; upper margin of right mandible slightly convex behind upper tooth; right upper tooth almost right-angled in lateral view; lowest terminal tooth of right mandible obsolete; upper portion of anterior lower tooth of right mandible represented by a low trapezoidal plate; lower portion of anterior lower tooth represented as a small denticle, located beneath the anterior angle of upper portion. Labrum with setiferous hair-bearing punctures, anterior margin weakly concave, anterior angles rounded, the left angle more prominent forwards than the right one, left lateral margin almost straight, right lateral margin weakly convex. Mentum with setiferous hair-bearing punctures throughout. Antenna with six short lamellae.

Pronotum polished, with a few setiferous hair-bearing punctures in lateral scar and marginal groove; posterior plate of prosternum with long hairs. Mesosternum pol-



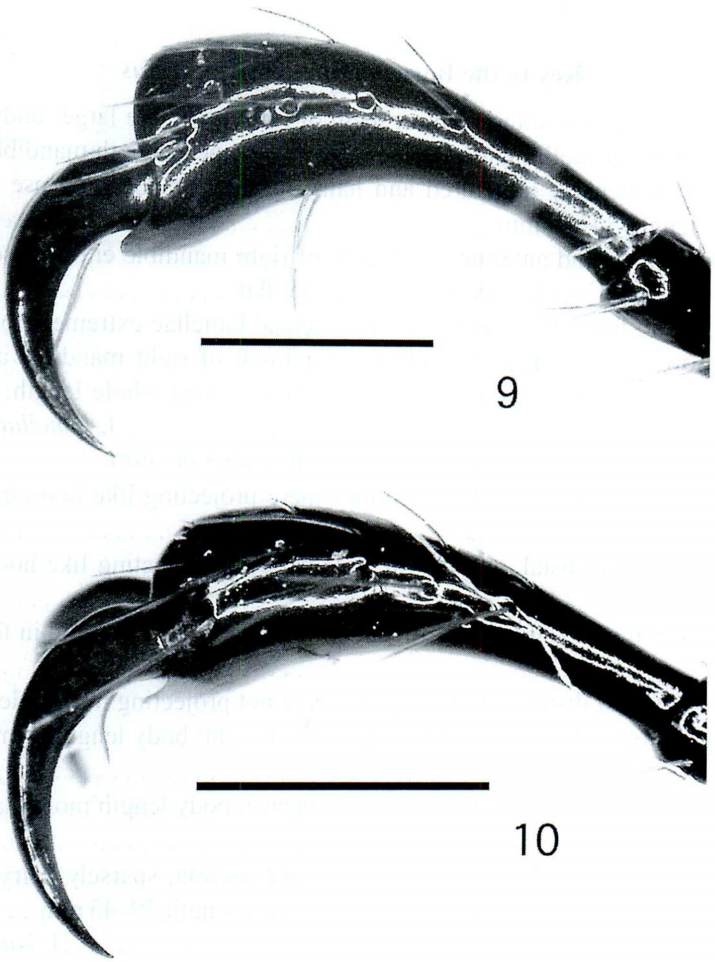
Figs. 5–8. Male genitalia of *Aceraius* spp., scale 1 mm. —— 5–6, *Aceraius hassani* sp. nov., holotype, ventral view (5), right lateral view (6); 7–8, *Aceraius sawaii* sp. nov., holotype, ventral view (7), left lateral view (8).

ished, impunctate, hairless, with lateral scar, rugose in the scar; mesothoracic episternum weakly frosted and impunctate in posterior portion, polished and with large punctures in both anterior and dorsal portions. Ridge separating anterior intermediate and lateral areas of metasternum blunt, punctured and hairy; lateral and anterior intermediate areas densely punctured and hairy throughout; posterior intermediate area hairy in posterior portion, hairless in anterior portion; central area impunctate and hairless throughout. Tenth rib of elytron punctured and hairy in anterior one-fourth, impunctate and hairless in posterior portion; ninth punctured and hairy in anterior one-fourth, more sparsely in posterior portion; eighth impunctate and hairless along whole length; seventh sparsely punctured and hairy along whole length; first with a few hairs in posterior portion close to elytral tip. Elytral striae hairless. Fifth tarsomere slender, moderately broadened distally in all legs.

Visible second abdominal sternite with a few hairs; third with a few hairs in lateral portion; fourth to sixth impunctate and hairless. Basal piece of male genitalia transverse, with anterior margin almost straight in ventral view; parameres united on ventral side, with median sulcus at the middle of ventral side, with anterior margin rounded in lateral view; penis large, rounded at distal end, with orifice at the base of dorsal side.

Variation. No sexual dimorphism evident. Body length of the female paratype, 34.2 mm.

Type series. Holotype: 1♂, Mt. Trus Madi, 1,500 m in altitude, Sabah, Borneo, 17–IX–1997, M. KON leg. Paratype: 1♀, the same data as for the holotype. The holotype is deposited in the collection of the Institute for Tropical Biology and Conserva-



Figs. 9–10. Fifth tarsomere of right hind leg of *Aceraius* spp., lateral view, scale 1 mm. —— 9, *Aceraius sabanus* KON, UEDA et JOHKI, male; 10, *Aceraius sawaii* sp. nov., male, holotype.

tion, University Malaysia Sabah.

Etymology. The specific name is dedicated to Mr. Minoru SAWAI, who has given us the opportunities of examining invaluable passalid specimens from Borneo.

Notes. This species is closely related to *A. sabanus* KON, UEDA et JOHKI but can be distinguidhed from the latter by the following points: the body is smaller (less than 35 mm), whereas, in *A. sabanus*, it is more than 35 mm; the fifth tarsomere is not strongly broadened distally (Fig. 10), whereas, in *A. sabanus*, it is strongly broadened distally (Fig. 9); the inner tubercle is larger; the side of elytron is not so densely hairy.

Specimens compared. *Aceraius sabanus* KON, UEDA et JOHKI: 1 ♂, Mt. Kinabalu, 1,700 m in altitude, 8–I–1997; 1 ♀, Gunung Emas, 1,600 m in altitude, Sabah, Borneo,

19–IX–1997, M. KON leg.

Key to the Bornean Species of *Aceraius*

1. Lowest terminal and anterior lower teeth of right mandible large; body rather flat; anterior lower tooth divided dorso-ventrally at apex in both mandibles; tenth rib of elytron densely punctured and hairy in anterior portion close to shoulder; body length 34–38 mm ..... *A. wallacei* (KUWERT).
— Lowest terminal and anterior lower teeth of right mandible either obsolete, absent or represented as small denticles; body not flat ..... 2.
2. Mesosternum hairy in central portion; antennal lamellae extremely long and slender; lowest terminal and anterior lower tooth of right mandible absent; ninth and tenth ribs of elytron punctured and hairy along whole length; body length 21–23 mm ..... *A. lamellatus* GRAVELY.
— Mesosternum hairless; antennal lamellae either long or short ..... 3.
3. Upper portion of distal end of fifth tarsomere projecting like hood in middle and hind legs ..... 4.
— Upper portion of distal end of fifth tarsomere not projecting like hood in all legs ..... 9.
4. Upper portion of distal end of fifth tarsomere projecting like hood in front leg ... . 5.
— Upper portion of distal end of fifth tarsomere not projecting in front leg ..... 8.
5. Anterior margin of labrum almost obliquely straight; body length 31 mm .... *A. jenisi* IWASE.
— Anterior margin of labrum more or less concave; body length more than 35 mm ..... 6.
6. Ninth rib of elytron densely hairy in anterior portion, sparsely hairy in posterior portion; anterior angle of head rounded; body length 39–43 mm .... *A. katsurae* IWASE.
— Ninth rib of elytron sparsely hairy in anterior portion, almost hairless in posterior portion; anterior angle of head either angular or prominent forwards ..... 7.
7. Anterior angle of head angular though not so prominent forwards; tenth rib of elytron sparsely hairy in anterior portion; body length 34–37 mm .... *A. boucheri* KON, ARAYA et JOHKI.
— Anterior angle of head distinctly prominent forwards; tenth rib of elytron hairless; body length 39 mm ..... *A. riekoae* IWASE.
8. Inner angle of left outer tubercle rounded; ridge separating intermediate and lateral areas of metasternum blunt; length 48–54 mm ..... *A. laniger* ZANG.
— Inner angle of left outer tubercle pointed inwards; ridge separating intermediate and lateral areas of metasternum distinct; body length 43–47 mm .... *A. kikutai* KON, JOHKI et BOUCHER.
9. Anterior angle of head prominent forwards ..... 10.

— Anterior angle of head not prominent forwards. . . . . 14.
10. Canthus with distinct denticle projecting upwards; body length 46–50 mm . . . . . *A. oculidens* ZANG.
— Canthus without denticle projecting upwards . . . . . 11.
11. Right outer tubercle long, obliquely truncated at distal end; outer angle of right outer tubercle much more prominent than the inner one, with acute apex; body length 43–45 mm . . . . . *A. illegalis* KUWERT.
— Right outer tubercle short and transversely truncated at distal end . . . . . 12.
12. Body length 45–55 mm . . . . . *A. grandis* (BURMEISTER).
— Body length less than 40 mm . . . . . 13.
13. Right outer tubercle strongly pointed downwards in anterior view; body length 35–39 mm . . . . . *A. moeschleri* KUWERT.
— Right outer tubercle not pointed downwards in anterior view; body length 30–35 mm . . . . . *A. laevicollis* (ILLIGER).
14. Upper margin of left mandible with convexity behind upper tooth . . . . . 15.
— Upper margin of left mandible without distinct convexity behind upper tooth . . . . . 16.
15. Seventh and eighth ribs of elytron sparsely punctured and hairy along whole length; ninth and tenth ribs densely punctured and hairy in anterior portion, more sparsely in posterior portion; body length 26–29 mm . . . . . *A. borneanus* KAUP.
— Eighth rib of elytron impunctate and hairless; ninth and tenth ribs densely punctured and hairy in anterior portion; seventh rib very sparsely punctured along whole length; body length 35–38 mm . . . . . *A. alutaceosternus* KUWERT.
16. Tenth rib of elytron punctured and hairy in anterior portion . . . . . 17.
— Tenth rib of elytron impunctate and hairless along whole length . . . . . 22.
17. Upper portion of right anterior lower tooth represented as a small semicircular swelling; left upper tooth simply pointed at apex; body length 31–35 mm . . . . . *A. alpinus* KON, UEDA et JOHKI.
— Upper portion of right anterior lower tooth represented as a low trapezoid; left upper tooth truncated at apex . . . . . 18.
18. Body length less than 35 mm . . . . . 19.
— Body length 35 mm or more . . . . . 20.
19. Central area of metasternum punctured in anterior portion close to mesocoxae; body length 29–32 mm . . . . . *A. hikidai* KON, UEDA et JOHKI.
— Central area of metasternum impunctate throughout; body length 34.2–34.5 mm . . . . . *A. sawaii* sp. nov.
20. Antennal lamellae moderately long; left outer tubercle with angular swelling in the middle of outer margin; left anterior lower tooth bifid dorso-ventrally at apex; body length 38–39 mm . . . . . *A. hidakai* KON, ARAYA et JOHKI.
— Antennal lamellae short . . . . . 21.
21. Right outer tubercle obliquely truncated at distal end; outer angle of right outer tu-

bercle more prominent forwards than the inner one; inner tubercles located symmetrically; body length 35–40 mm. . . . . *A. sabanus* KON, UEDA et JOHKI.

— Right outer tubercle rounded at distal end; left inner tubercle located a little more anteriorly than the right one; body length 48–50 mm. . . . . *A. hassani* sp. nov.

22. Body length less than 40 mm; antennal lamellae long and slender; left outer tubercle broad, weakly bifid at distal end; right outer tubercle triangular; body length 36–38 mm . . . . . *A. laevimargo* ZANG.

— Body length 45 mm or more; antennal lamellae short. . . . . 23.

23. Right outer tubercle completely absent; left inner tubercle located a little more anteriorly than the right one; supraorbital ridge strongly curved inwards in anterior portion; body length 46–51 mm . . . . . *A.tricornis* ZANG.

— Right outer tubercle present; inner tubercles located symmetrically. . . . . 24.

24. Right outer tubercle represented as a weak swelling of anterior margin of head; supraorbital ridge curved inwards in anterior portion; body length 45–49 mm. . . . . *A. kuwerti* ZANG.

— Right outer tubercle distinct, obliquely truncated; outer angle of right outer tubercle more prominent than the inner one; supraorbital ridge not curved inwards in anterior portion; body length 47–49 mm. . . . . *A. kinabalensis* KON et JOHKI.

Acknowledgments

We wish to express our cordial thanks to K. IWASE, M. SAWAI and A. GILLOGLY for giving us the opportunities to examine invaluable specimens. Our cordial thanks are also due to T. MATSUMOTO, C. A. NALEPA, S. KITADE, T. MIURA, K. MAEKAWA, M. MACHIDA and T. KIKUTA for warm companionship and assistance during the field researches. This study was supported in part by a Grant-in-Aid from the Japan Society for the Promotion of Science (No. 18405012).

要　　約

近　雅博・荒谷邦雄・Maryati MOHAMED：ボルネオからのオオクロツヤムシ *Aceraius* 属の2新種とボルネオ産のオオクロツヤムシの種への検索表．—— ボルネオからオオクロツヤムシ属の2新種を記載し，それぞれ*A. hassani* sp. nov. および*A. sawaii* sp. nov. と名付けた．*A. hassani* sp. nov. は同属の他種からは，体長が大きい（47 mm以上），頭部前角が丸まる，鞘翅の第10間室の前方に毛がある，左のinner tubercleが右のものより少し前に位置する，などによって区別できる．*A. sawaii* sp. nov. は*A. sabanus* に似ているが，体長がより小さく（35 mm未満），5番目の付節小片末端が強く広がらないことなどによって区別できる．

References

BOUCHER, S., 1993. Référence spéciale sur les caractères morphologiques-clés séparant les genres indomalais *Aceraius* KAUP et *Ophrygonius* ZANG, avec les descriptions de sept nouveaux *Ophrygonius*

(Coleoptera, Passalidae). *Nouv. Revue Ent.*, (N.S.) **10**: 153–172.

BOUCHER, S., & M. KON, 1999. Remarques sur quelques *Ophrygonius* ZANG de la Péninsula Malaise, de Sumatra et de Bornéo [Coleoptera, Passalidae]. *Revue fr. Ent.*, (N.S.), **21**: 125–130.

GRAVELY, F. H., 1914. An account of the Oriental Passalidae based primarily on the collection in the Indian Museum. *Mem. Ind. Mus.*, **3**: 177–353.

HINCKS, W. D., & J. R. DIBB, 1935. Passalidae. *In* JUNK, W., & S. SCHENKLING (eds.), *Coleopterorum Catalogus*, pars 142: 1–118. W. Junk, Berlin.

——— & ——— 1958. Passalidae. *In* HINCKS, W. D. (ed.), *Coleopterorum Catalogus Supplementa*, pars 142: 1–32. W. Junk, Berlin.

IWASE, K., 1993. A new species of *Aceraius* (Coleoptera, Passalidae) from Borneo. *Elytra, Tokyo*, **21**: 271–274.

——— 1994. A new species and a new subspecies of the genus *Aceraius* (Coleoptera, Passalidae) from Sumatra. *Ibid.*, **22**: 133–137.

——— 1995. Three new species of the passalid beetles (Coleoptera, Passalidae) from Borneo. *Ibid.*, **23**: 61–69.

KON, M., 2001. Redescription of *Ophrygonius minor* (GRAVELY) (Coleoptera, Passalidae) with a new synonym. *Spec. Publ. Jpn. coleopterol. Soc., Osaka*, **1**: 107–109.

——— & Y. JOHKI, 1989 a. Re-evaluation of the status of *Aceraius kuwerti* (Coleoptera: Passalidae) from Borneo. *Jpn. J. Ent.*, **57**: 91–95.

——— & ——— 1989 b. A new species of *Aceraius* (Coleoptera: Passalidae) from Mt. Kinabalu, Sabah, Borneo. *Jpn. J. Ent.*, **57**: 533–535.

——— & ——— 1992. Redescription of *Aceraius perakensis* KUWERT, 1898 (Coleoptera, Passalidae), with re-evaluation of the status of *A. laevimargo* ZANG, 1905. *Elytra, Tokyo*, **20**: 57–60.

——— & ——— 1993. Redescription of *Ophrygonius wallacei* (KUWERT, 1891) (Coleoptera, Passalidae), with a new synonym. *Ibid.*, **21**: 111–114.

———, K. ARAYA & Y. JOHKI, 1992. A new species of *Aceraius* (Coleoptera, Passalidae) from the Malay Peninsula. *Ibid.*, **20**: 203–206.

———, ——— & ——— 1993 a. Passalid beetles (Coleoptera, Passalidae) collected from Sarawak, Borneo. I. The subfamily Passalinae, with description of a new *Aceraius* species from Mt. Mulu. *Ibid.*, **21**: 115–122.

———, ——— & ——— 1993 b. A new species of *Aceraius* (Coleoptera, Passalidae) from Sabah, Borneo, with redescription of *A. moeschleri* KUWERT. *Jpn. J. Ent.*, **61**: 711–717.

———, A. UEDA & Y. JOHKI, 1993 c. A new *Aceraius* species (Coleoptera, Passalidae) from Sabah, Borneo. *Elytra, Tokyo*, **21**: 275–279.

———, Y. JOHKI & S. BOUCHER, 1995 a. A new species of *Aceraius* (Coleoptera, Passalidae) from Sabah, Borneo. *Jpn. J. Ent.*, **63**: 53–57.

———, A. UEDA & Y. JOHKI, 1995 b. Two new species of *Aceraius* (Coleoptera, Passalidae) from Sabah, Borneo. *Jpn. J. syst. Ent.*, **1**: 99–104.

———, Y. JOHKI & K. ARAYa, 2003. Two new species of the genus *Aceraius* (Coleoptera, Passalidae) from Sumatra, with a key to the Sumatran species of *Aceraius*. *Spec. Bull. Jpn. Soc. Coleopterol., Tokyo*, (6): 179–187.

LINDROTH, C., 1957. The principal terms used for male and female genitalia in Coleoptera. *Opusc. ent., Lund*, **22**: 241–256.

VAN DOESBURG, P. H., 1941. *Aceraius lamellatus* GRAV. from Celebes. *Tidschr. Ent.*, **84**: 358.